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Cost-effective, secure switching with simplified management for your growing business

Growing businesses require cost-effective, networking solutions that can scale with ever-changing business needs. The Linksys SLM248G4S Smart Switch with Resilient Clustering technology brings a whole new level of intelligence and security to the network infrastructure at a cost-effective price. It offers 48 10/100 Ethernet (copper) ports with four 10/100/1000 Gigabit Ethernet copper or optional optical (SFP) interfaces for uplinking the switch to the core network.

Network security is a top priority in any size business; unauthorized access to the network and mission critical data is a constant concern. The SLM248G4S is able to secure the network through 802.1X port authentication and MAC Filtering. 802.1X requires clients to authenticate themselves before they are given access to the network.

The SLM248G4S switches provide Resilient Clustering technology which enables several switches to be clustered together and managed as a single switch with one Web Management interface and one IP address. This technology allows up to 4 units of the SLM248G4S (or up to 192 ports when combined with SLM224G4S) to be set up in a switch cluster. SLM248G4S units can coexist in a switch cluster with other Linksys Smart Switches that support Resilient Clustering technology—SLM224G4PS, SLM224G4S, and SLM248G4PS.

Businesses are recognizing the benefits of Voice over IP (VoIP) technology and are quickly migrating their voice services to IP-based platforms, requiring their local area networks to support both voice and data applications. The SLM248G4S's extensive QoS features make the solution ideal for real-time applications like Voice and Video. The four priority queues together with Weighted Round Robin and Strict Priority scheduling techniques let network administrators quickly prioritize real-time voice and video traffic over data traffic. Individual users or applications can also be prioritized above others using various Class of Service options—by port, Layer 2 priority (802.1p), and Layer 3 priority (TOS or DSCP). Intelligent Broadcast, Multicast, and Unknown Unicast storm control minimizes and contains the effects that these types of storms have on regular traffic. IGMP Snooping limits bandwidth-intensive video traffic to only the requestors without flooding to all users. Incoming traffic can be policed and outgoing traffic can be shaped allowing network administrators to control network access and traffic flow.

The SLM248G4S also includes features for network expansion and faster throughput performance. Link aggregation enables network administrators to create multiple high-bandwidth trunks between switches. This provides a level of reliability because the system will continue to operate if one of the links breaks. Spanning Tree (STP) allows administrators to avoid network loops and to build a mesh of switches to increase the availability of their network.

The simplified user interface provides an intuitive, secure management platform enabling administrators to better utilize the extensive feature set of the switch, resulting in a better optimized, more secure network.

Easy-to-use Web browser interface makes installation quick and effortless

Grow your network with options like Resilient Clustering and Link Aggregation

802.1X port authentication and MAC address filtering brings network security down to the switch port level

Advanced QoS enables the network to be optimized for your networked applications, including voice, video and data storage

48-Port 10/100 + 4-Port Gigabit Smart Switch with Resilient Clustering Technology

Model: **SLM248G4S**



SLM248G4S

PRODUCT DATA

BUSINESS SERIES

Features

- 48 - 10/100 Switched RJ-45 ports deliver up to 9.6 Gbps of throughput
- 2 shared 10/100/1000 mini-GBIC ports
- Switching Capacity delivers wire-speed performance at 17.6 Gbps non-blocking capacity
- WebView monitoring allows administrators to view the current status and configuration using their favorite web browser
- Auto MDI/MDIX per port allows for automatic Cable detection
- Port-based and 802.1q-based VLANs support up to 128 VLANs
- Port configuration settings for Link, Speed, Auto MDI/MDIX, Flow Control, and more
- Fully rack-mountable using the included rack mounting hardware
- MAC Address table supports up to 8K MAC Address entries
- Optimal platform to support real-time applications, such as voice and video, by providing features like IGMP snooping, multiple queues (4) with appropriate scheduling techniques, prioritization of traffic based on port, 802.1p, IP TOS/precedence/DSCP, and line rate forwarding mechanisms
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PRODUCT DATA

BUSINESS SERIES

48-Port 10/100 + 4-Port Gigabit Smart Switch with Resilient Clustering Technology

Specifications

Model	SLM248G4S
Ports	48 RJ-45 Connectors for 10BASE-T/100BASE-TX, 4 RJ-45 Connectors for 10BASE-T/100BASE-TX/1000BASE-T with 2 Shared SFP Slots and 2 Gigabit Ports
Buttons	None
Cabling Type	UTP CAT 5 or better for 10BASE-T/100BASE-TX, UTP CAT 5e or better for 1000BASE-T
LEDs	Power, Link/Act, Speed

Performance

Switching Capacity	17.6 Gbps, Non-blocking
MAC Table Size	8K
Number of VLANs	128

Switch Clustering

Switch Cluster Operation	Maximum Switch Cluster Size: 192 Ports Maximum no. of Units in Switch Cluster: 6 (with SLM224G4S) Hot Insertion and Removal Ring and Chain Options Master and Backup Master for Resilient Cluster Control Auto-numbering or Manual Configuration of Units in Switch Cluster
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Management

Web User Interface	Built-in Web UI for easy browser-based configuration (HTTP)
SNMP	SNMP version 1, 2c, 3
SNMP MIBs	RFC1213 MIB-2, RFC2863 Interface MIB, RFC2665 Ether-like MIB, RFC1493 Bridge MIB, RFC2674 Extended Bridge MIB (P-bridge, Q-bridge), RFC2819 RMON MIB (groups 1, 2, 3, 9 only), RFC2737 Entity MIB, RFC 2618 RADIUS Client MIB
RMON	Embedded Remote Monitoring (RMON) software agent supports four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware Upgrade	Web Browser Upgrade (HTTP) TFTP Upgrade
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
Other Management	Switch Audit Log DHCP Client BootP SNTP Xmodem Upgrade Cable Diagnostics Port Mirroring PING

Security Features

IEEE 802.1x Access Control	802.1x Authentication: RADIUS; EAP-TTLS, PEAP, EAP-MD5, LEAP, EAP-TLS ToS/DSCP
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Availability

Link Aggregation	Link Aggregation Using IEEE 802.3ad LACP Up to 8 Ports in Up to 8 Trunks
Storm Control	Broadcast and Multicast
Spanning Tree	IEEE 802.1d Spanning Tree, Fast Linkover
IGMP Snooping	IGMP (v1/v2) Snooping provides for fast client joins and leaves of multicast streams and limits bandwidth-intensive video traffic to only the requestors

QoS

Priority Levels	4 Hardware Queues
Scheduling	Priority Queueing and Weighted Round Robin (WRR)
Class of Service	Port-based 802.1p VLAN Priority-based IPv4 IP Precedence/ToS/DSCP

Features (continued)

- Enhanced QoS functions including rate limiting for ingress/egress and per flow at 64kbps granularity
- HTTP interface
- User/Network security via 802.1x (with Radius authentication) and MAC-based filtering
- Containment of storms—Broadcast and Multicast
- Expandability and availability increased across multiple switches using Link Aggregation
- Port Trunking for up to 8 groups with up to 8 ports per group allows you to increase your bandwidth for each uplink or Server connection
- SNMP and RMON management expand your visibility options

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Linksys products are available in more than 50 countries, supported by 12 Linksys Regional Offices throughout the world. For a complete list of local Linksys Sales and Technical Support contacts, visit our worldwide website at www.linksys.com

PRODUCT DATA

BUSINESS SERIES

LINKSYS®
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Layer 2

VLAN

Port-based and 802.1q-based VLANs

HOL Blocking

Management VLAN

Jumbo Frame

Head of Line Blocking Prevention

Supports Frame size up to 10Kbytes

Standards

802.3 10BASE-T Ethernet,
802.3u 100BASE-TX Fast Ethernet,
802.3ab 1000BASE-T Gigabit Ethernet,
802.3z Gigabit Ethernet,
802.3x Flow Control

Environmental

Dimensions (W x H x D)

17.32" x 1.75" x 13.81" (440 x 44.45 x 350.8 mm)

Weight

8.77 lb (3.98 kg)

Power

100-240V 0.5A

Certification

FCC Part 15 Class A, CE Class A, UL CSA (CSA22.2), CE mark, CB

Operating Temp.

32 to 104°F (0 to 40°C)

Storage Temp.

-4 to 158°F (-20 to 70°C)

Operating Humidity

20 to 95%, Noncondensing

Storage Humidity

5 to 90%, Noncondensing

Package Contents

- One SLM248G4S Switch
- One AC Power Cord
- One Rack Mounting Kit with Brackets and Hardware
- One CD with User Guide in PDF Format
- One Online Registration Card
- Console Cable

Minimum Requirements

- Web-based Utility: Web Browser—Microsoft Internet Explorer (version 5.5 or above)
- Cat5 Ethernet Network Cable

Check the product package and contents for specific features supported. Specifications are subject to change without notice.



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